Figure 1

Typical Prior Art Processor Architecture

00h030 "SEEE960
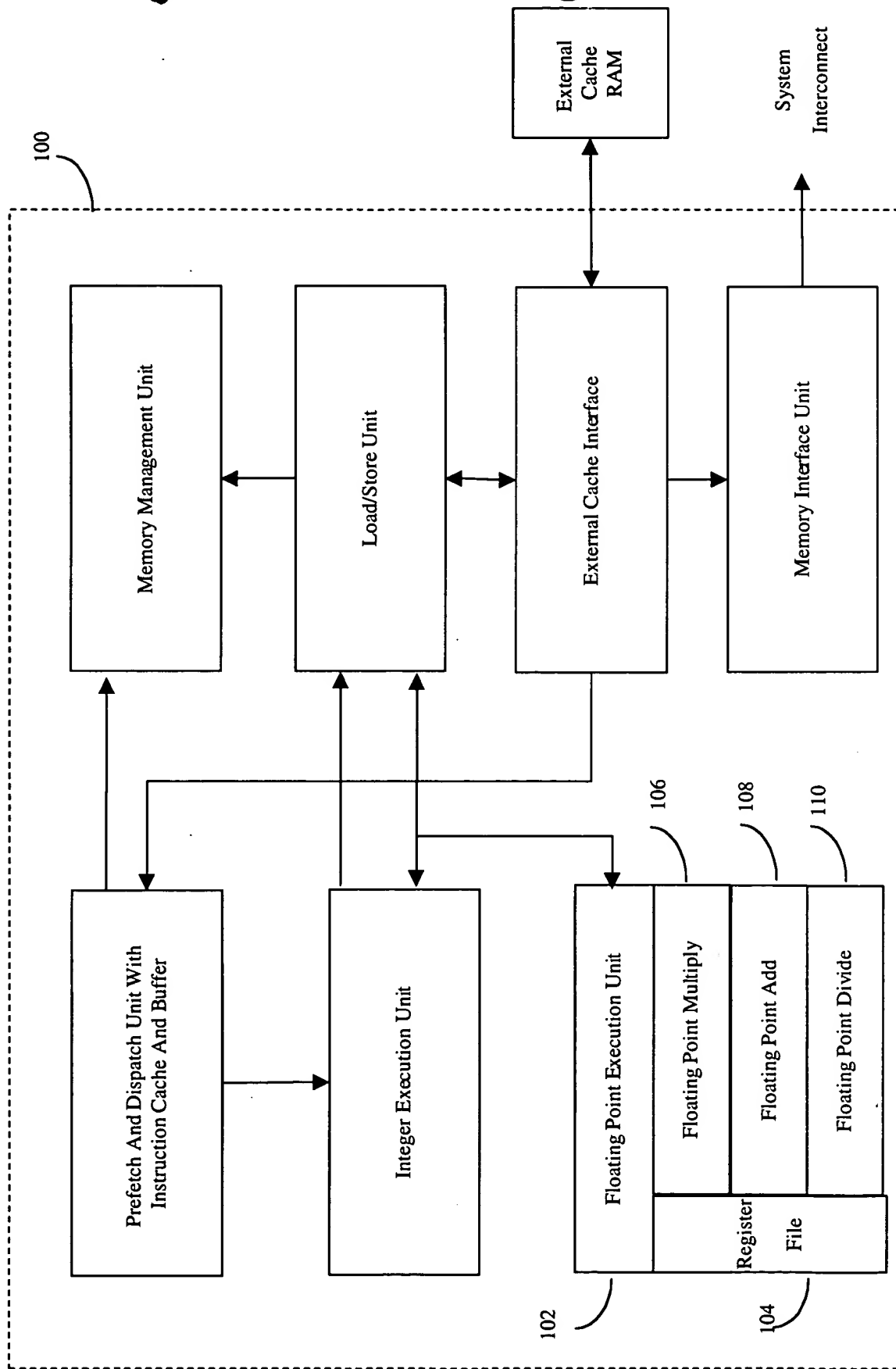
Figure 2

Floating Point Execution Unit:

Block Diagram Of Relevant Functionality

(Prior Art)

Figure 3
Prior Art Functional Pipeline
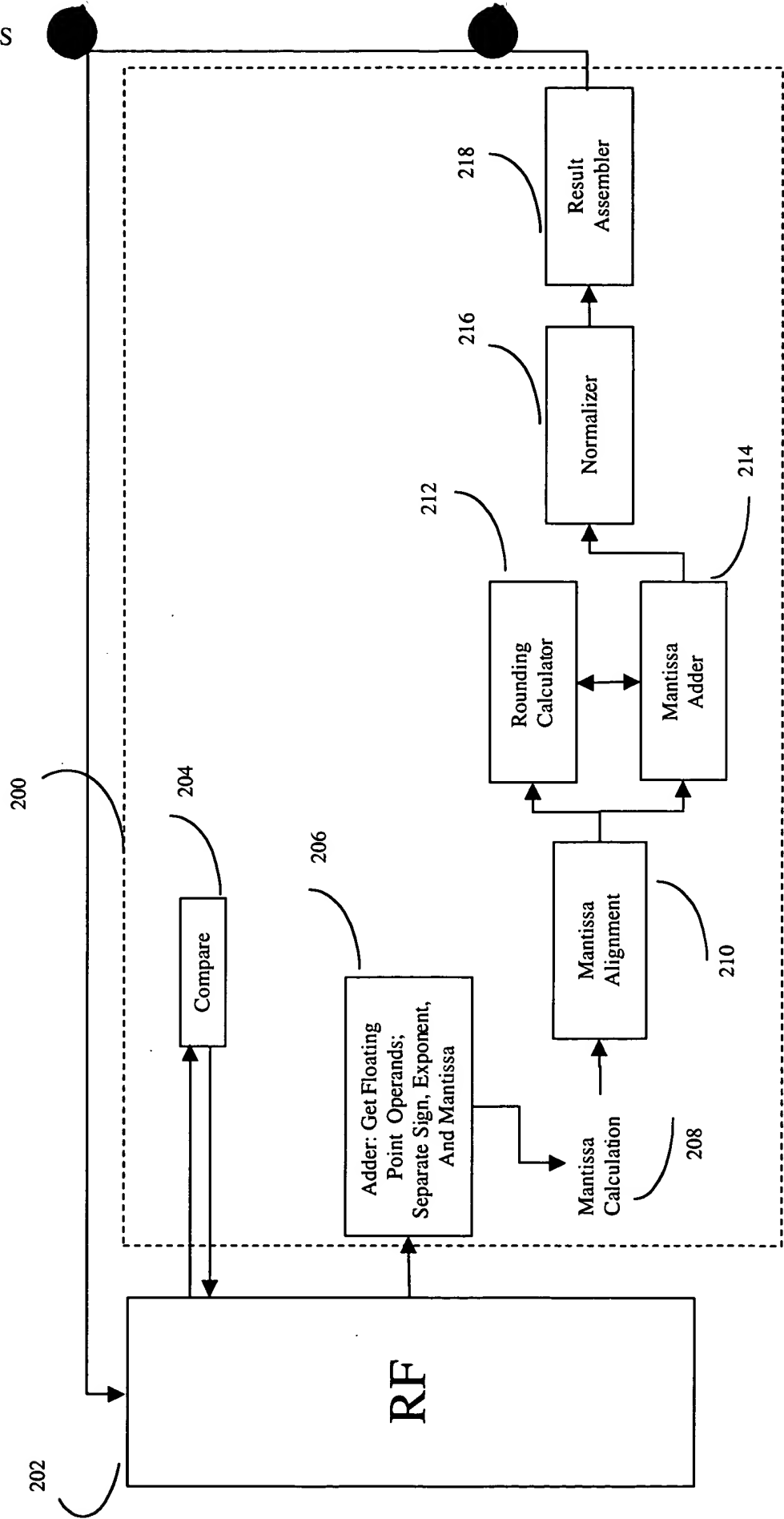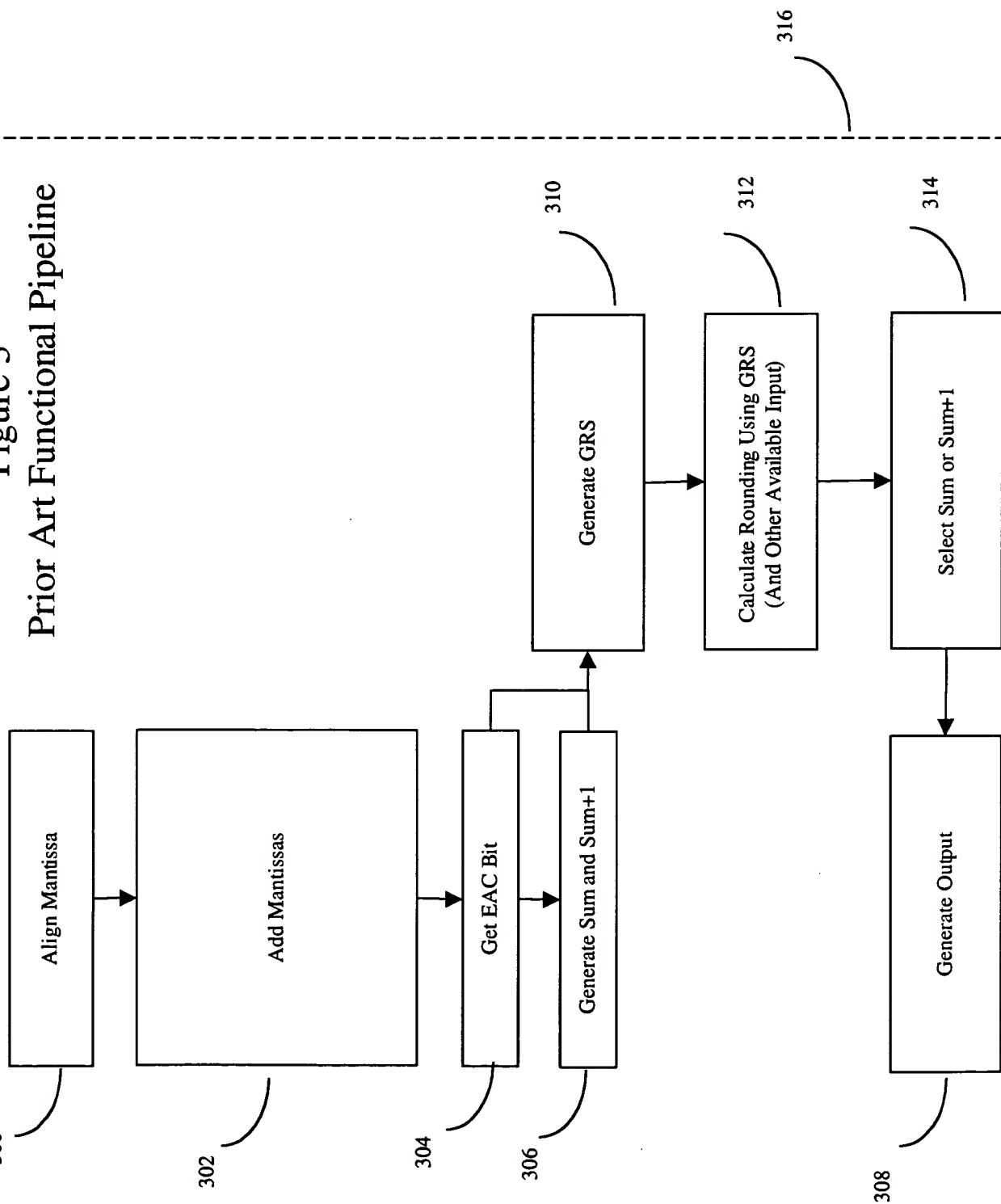
Block Diagram Of Relevant Portion Of A Floating
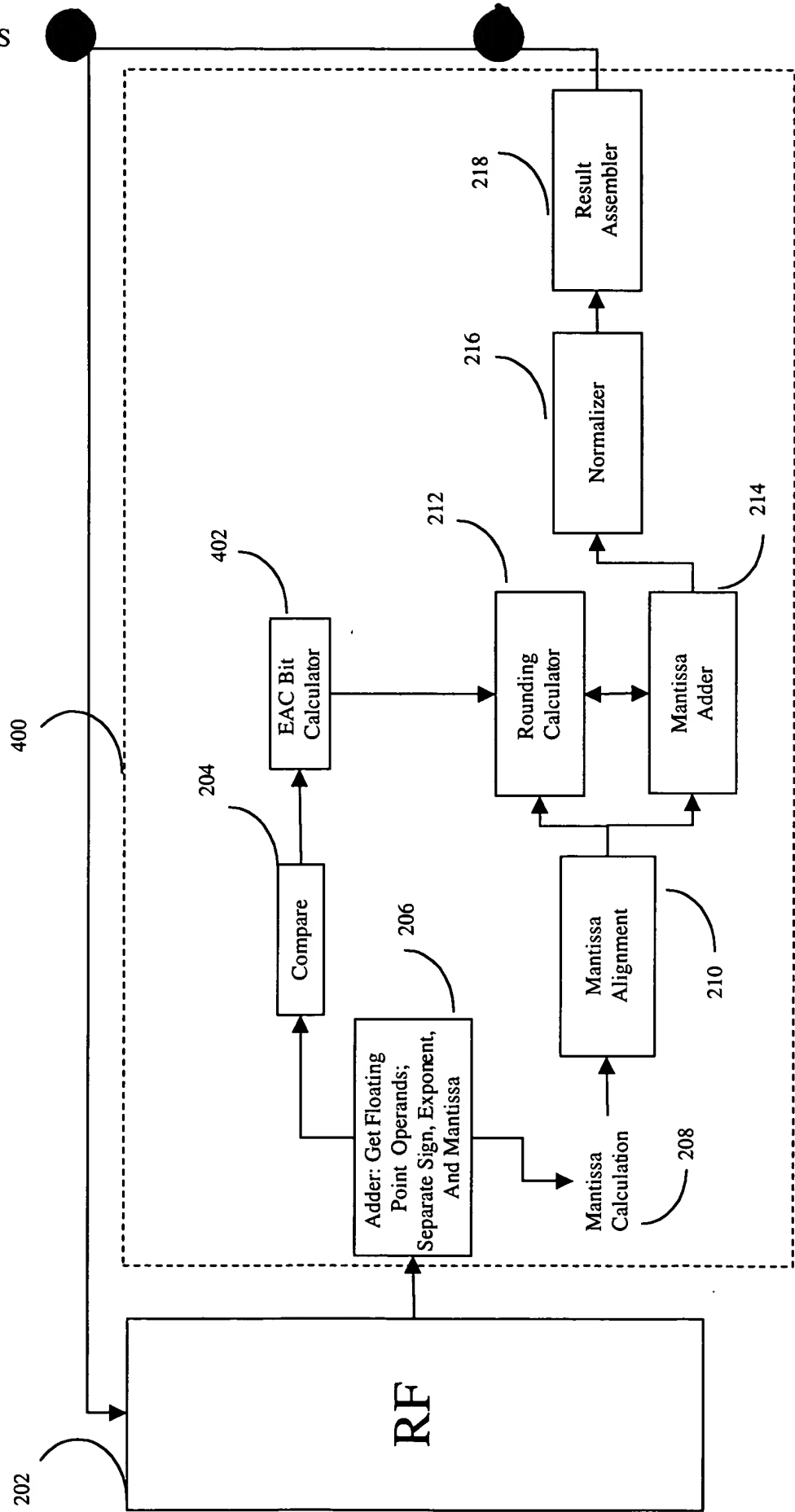Point Execution Unit With Present Invention

Figure 4

EK686541792US

Figure 5
Functional Pipeline
With Present Invention

502
Compare

504
Calculate EAC Bit

310
Generate GRS

312
Calculate Rounding Using GRS
(And Other Available Input)

314
Select Sum or Sum+1

500

300
Align Mantissa

302
Add Mantissas

304
Get EAC Bit

306
Generate Sum and Sum+1

308
Generate Output